

Anatomy lect 1 :

- L1 transyloric plane -> hilum
 - ureter is posterior inferior in relation to renal vein & artery
 - upper part of ureter is renal pelvis
 - anterior surface of kidney only covered by peritenum
 - First covering of kidney is renal capsule
 - most outer covering layer is pararenal fat
 - during any surgery in kidney we should not move the renal fascia to avoid damaging the adrenal gland
 - renal pelvis continuation of ureter
 - Rt colic flexure called hepatic flexure
 - Lf colic flexure called splenic flexure
 - second part (decending) of duodenum in the hilum
 - tail of pencreas in the hilum
 - over the renal pyramid is the arcuate artery
 - collecting duct open in the renal pyramid
 - Vasa recta if branch of the interlobular artery a branch of arcuate artery
 - lower end of ureter which is entering the bladder supply by the superior vescical artery
 - upper end of ureter supply by the renal plexuse
- Middle -> gonadal (overial, testicular) plexes
Lower _> hypogasteric plexues

Causes of metabolic acidosis?

1- ↑ acid production in blood by:

↑ uic acid in blood

↑ urea in blood

↑ Ammonia(NH₃) in blood

2- ↓ H⁺ exertion by kidney caused by renal failure

Anatomy lec 2

Nerve supply for bladder :

inferior hypogastric plexus

Which is sympathtic and parasympathetic

the amino acid that gives maple syrup odor is

isoleucine

Kidney uses of energy:

Ketone bodies in early fasting

Fatty acid in late fasting

Glucose in fed state

Synthesis of ketone bodies :

In liver BUT do not use it for energy , they use FA (in starvation)

Synthesis of glucose (gluconeogenesis) :

-liver .

-kidney in starvation (prolonged fasting) after 60 hrs . Thus renal failure patients will be affected more in prolonged fasting

Cause of metabolic acidosis is

Not enough produce NH_3 and increase in H

Phsl6

Chatecolamines works most: Afferent arterioles

Angiotensin II works on : efferent arterioles

كلهم vasoconstriction

Interstitial cystitis without bacterial infection

Ureteric bud gives:

1-ureter

2-Renal pelvis

3-major calyces

4-minor calyces

5-collecting tubules

Cap of the metanephric mesenchyme gives:

1-bowmans calpsule

2-PCT

3-DCT

4-ascending & descending limb of henle loop

Overflow protienurea

Make sure to know the 3 causes of them

Urea recirculation

1_ the concentration of urea if h₂o is low or deficient

2_ the dilution of urea if h₂o is excess

لو الموية قليل اليوريا تركيزها ببعلى وبيصير اليورن مركز

العكس لو الموية زادت ...

Triphasic pattern in wilms tumor:

1-blastema* cells

2-stromal cells

3-epithelial cells

Extrophy of cloca include :

1-extrophy of bladder

2-spinal defect

3-imperforate anus

4-omphalocele

2 function of ADH ?

:1-anti diuretic

2-vasoconstriction

3- increase Aquaporin-2 water channel protein

Cystic change in

Clear cell

Collecting duct

Cystic formation in

Wilms tumor

Clear cell RCC common in familia cases

-

At 67 years of age, Mr. H underwent a transurethral prostatectomy

For cancer of the prostate .

Because of concern about postoperative bleeding from straining during urination, he had a catheter placed into the bladder.

Three days later, Mr. H developed a urinary tract infection with low-grade fever, some pain, and pyuria .

Quantitative urine culture counts 3*10⁵ CFU/ml of urine.

The microbe was Gram's negative lactose fermenter bacilli with indole positive reaction. Physicians were able to control the infection with gentamicin therapy.

لا تنسون في الباث

Best prognosis is chromophobe RCC

صور الاناث اللي صورناها

<https://www.dropbox.com/sh/x6v1nhw29x3p6s/AACwtJv7Yu-cuWZCTYwvCDYka?dl=0>

ال point's of Identification

https://www.dropbox.com/sh/2nxha880d40gcxk/AAA17J5flmvSQZ_P-hlCCndga?dl=0

صور ثانية للاناث

https://www.dropbox.com/sh/s010s083o1hb0mw/AADDubwmVMVvGFn3_2F0stDpa?dl=0

OSPE

Anat

Penile urethra

Membranous urethra

Detrouse muscle

Ureter

Renal vein

Parymid (medulla)